



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**D206-648-013**  
**Job Sheet 199045**



**Part No:** D206-648-013

**Job Qty:** 5 pcs ✓

**Part Name:** Ground Handling Wheel Modification



**Part Weight:** 0 lbs

**Status:** New

**Priority:** Medium

**Job Created:** 8/12/19

**Job Tracking No:**

**Due Date:** 8/30/19

**Created By:** Marie Lajeunesse

**Type:** Stock

**Description:**

**Note:** DWG REV B IPP Rev:A 05.09.23 New issue KJ/JLM IPP Rev:B 07-12-05 ECN 1080p DD verified by:

**Ship Via:**

### Bill of Materials

### Job Routing

| Op No | Operation              | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off |
|-------|------------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|----------|
|       |                        |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |          |
| 110   | Packaging 1 - Pick Kit | 5 pcs |            | 8/30/19  | 0.00      | 0.00    | Packaging 1 - 1       |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 2       |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 3       |           | Oscar    |
|       |                        |       |            |          |           |         | Packaging 1 - 4       |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 5       |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 6       |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 7       |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 8       |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 9       |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 10      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 11      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 12      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 13      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 14      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 15      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 16      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 17      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 18      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 19      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 20      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 21      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 22      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 23      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 24      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 25      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 26      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 27      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 28      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 29      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 30      |           |          |
|       |                        |       |            |          |           |         | Packaging 1 - 31      |           |          |



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL : 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

**Container No:** S205799



**Part:** D206-648-013

**Job No:** 199045

**Serial No/Batch:** S205799

**Revision:**

**Inspector:**

**Exp Date:**

**Instructions:** Various STC's

Date: 08/15/19

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|                                 |       |         |           |                        |  |
|---------------------------------|-------|---------|-----------|------------------------|--|
|                                 |       |         |           | Packaging 1 - 32       |  |
|                                 |       |         |           | Packaging 1 - 33       |  |
|                                 |       |         |           | Packaging 1 - 34       |  |
|                                 |       |         |           | Packaging 1 - 35       |  |
|                                 |       |         |           | Packaging 1 - 36       |  |
| 120 QC 4                        | 5 pcs | 8/30/19 | 0.00 0.00 | QC 4 - 28              |  |
|                                 |       |         |           | QC 4 - 58              |  |
|                                 |       |         |           | QC 4 - 69              |  |
|                                 |       |         |           | QC 4 - 9               |  |
|                                 |       |         |           | QC 4 - 46              |  |
|                                 |       |         |           | QC 4 - 68              |  |
|                                 |       |         |           | QC 4 - 72              |  |
|                                 |       |         |           | QC 4 - 74              |  |
|                                 |       |         |           | QC 4 - 75              |  |
| 130 Packaging 3-1 - Stock - B4B | 5 pcs | 8/30/19 | 0.00 0.00 | Packaging 3 - 1 - B4B  |  |
|                                 |       |         |           | Packaging 3 - 2 - B4B  |  |
|                                 |       |         |           | Packaging 3 - 3 - B4B  |  |
|                                 |       |         |           | Packaging 3 - 4 - B4B  |  |
|                                 |       |         |           | Packaging 3 - 5 - B4B  |  |
|                                 |       |         |           | Packaging 3 - 6 - B4B  |  |
|                                 |       |         |           | Packaging 3 - 7 - B4B  |  |
|                                 |       |         |           | Packaging 3 - 8 - B4B  |  |
|                                 |       |         |           | Packaging 3 - 9 - B4B  |  |
|                                 |       |         |           | Packaging 3 - 10 - B4B |  |
|                                 |       |         |           | Packaging 3 - 11 - B4B |  |
|                                 |       |         |           | Packaging 3 - 12 - B4B |  |
|                                 |       |         |           | Packaging 3 - 13 - B4B |  |
|                                 |       |         |           | Packaging 3 - 14 - B4B |  |
|                                 |       |         |           | Packaging 3 - 15 - B4B |  |
|                                 |       |         |           | Packaging 3 - 16 - B4B |  |
|                                 |       |         |           | Packaging 3 - 17 - B4B |  |
|                                 |       |         |           | Packaging 3 - 18 - B4B |  |
|                                 |       |         |           | Packaging 3 - 19 - B4B |  |
|                                 |       |         |           | Packaging 3 - 20 - B4B |  |
|                                 |       |         |           | Packaging 3 - 21 - B4B |  |
|                                 |       |         |           | Packaging 3 - 22 - B4B |  |
|                                 |       |         |           | Packaging 3 - 23 - B4B |  |
|                                 |       |         |           | Packaging 3 - 24 - B4B |  |
|                                 |       |         |           | Packaging 3 - 25 - B4B |  |
|                                 |       |         |           | Packaging 3 - 26 - B4B |  |
|                                 |       |         |           | Packaging 3 - 27 - B4B |  |
|                                 |       |         |           | Packaging 3 - 28 - B4B |  |
|                                 |       |         |           | Packaging 3 - 29 - B4B |  |
|                                 |       |         |           | Packaging 3 - 30 - B4B |  |
|                                 |       |         |           | Packaging 3 - 31 - B4B |  |
|                                 |       |         |           | Packaging 3 - 32 - B4B |  |
|                                 |       |         |           | Packaging 3 - 33 - B4B |  |
|                                 |       |         |           | Packaging 3 - 34 - B4B |  |
|                                 |       |         |           | Packaging 3 - 35 - B4B |  |
|                                 |       |         |           | Packaging 3 - 36 - B4B |  |
| 135 DC - 1 - B4B                | 5 pcs | 8/30/19 | 0.00 0.00 | DC - 1 - B4B           |  |
|                                 |       |         |           | DC - 2 - B4B           |  |
| 140 QC 21 - FG                  | 5 pcs | 8/30/19 | 0.00 0.00 | QC 21 - FG - 21        |  |
|                                 |       |         |           | QC 21 - FG - 70        |  |
|                                 |       |         |           | QC 21 - SA - 53        |  |

Part Op 110 - (Pick Kit)  
 Descriptions: 120 - (QC4- 100% Inspect kits for completeness)  
 130 - (Identify as per dwg & Stock Location: \_\_\_\_\_) Identify and pack for shipping as per PPP D206-648-013  
 135 - (Document Control) Photocopy bluefile and create labels per PPP D206-648-013 CHG002  
 140 - (QC21- Final Inspection - Work Order Release)

DAS  
77  
9-89

8/22/2019

Max B

8/22/  
2019

AUG 22 2019

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AUG 22 2019DAS  
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9-89

**Job BOM**

| Part / Item   | Component Name     | Quantity        | Operation                  | Container  |
|---------------|--------------------|-----------------|----------------------------|------------|
| AN3C37A       | Bolt               | 20 Ea (4 ea) ✓  | 110-Packaging 1 - Pick Kit | S 198263 ✓ |
| D2652         | Bushing            | 40 pcs (8 ea) ✓ | 110-Packaging 1 - Pick Kit | S 195628 ✓ |
| D3414-041     | Lug                | 10 pcs (2 ea) ✓ | 110-Packaging 1 - Pick Kit | S 045779 ✓ |
| MS21043-3     | Nut                | 20 Ea (4 ea) ✓  | 110-Packaging 1 - Pick Kit | S 176493 ✓ |
| NAS1149C0363R | Washer (AN960C10 ) | 20 Ea (4 ea) ✓  | 110-Packaging 1 - Pick Kit | S 181423 ✓ |

**Job Allocations**

| Operation                  | Component Part | Required | Inventory | Allocated |
|----------------------------|----------------|----------|-----------|-----------|
| 110-Packaging 1 - Pick Kit | AN3C37A        | 20       | 101       | 0         |
|                            | D2652          | 40       | 289       | 0         |
|                            | D3414-041      | 10       | 18        | 0         |
|                            | MS21043-3      | 20       | 779       | 0         |
|                            | NAS1149C0363R  | 20       | 614       | 0         |

**Part Specifications**

Specifications could not be found.

Plex 8/12/19 8:20 AM Dart.lajeunesse.marie

Master Unit No

011400



Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                        |  |              |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|--------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                        | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                        |  |              |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   | Sequence #:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | QTY Affected :         |  | MRB (QSI042) |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Disposition            |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Completed By           |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Lead hand / Supervisor |  |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | QC / QA Coordinator    |  |              |  |
| <b>Root Cause</b><br><br>Operator <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Preservation <input type="checkbox"/><br>Material <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Human Factors <input type="checkbox"/> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> <div> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |                        |  |              |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                        |  |              |  |

FOR INSTALLATION INSTRUCTIONS/REQUIREMENTS AND TECHNICAL INFORMATION SEE APPLICABLE  
DART INSTALLATION INSTRUCTIONS.

| QTY<br>-011 | QTY<br>-013 | PART NUMBER  | DESCRIPTION         |
|-------------|-------------|--------------|---------------------|
| X           |             | D206-648-011 | GROUND HANDLING KIT |
|             | X           | D206-648-013 | GROUND HANDLING KIT |
| 8           | 8           | D2652        | BUSHING             |
| 2           |             | D2659        | GHW LUG             |
|             | 2           | D3414-041    | LUG ASSEMBLY        |
| 4           |             | AN3-37A      | BOLT                |
|             | 4           | AN3C37A      | BOLT                |
|             | 4           | AN960C10     | WASHER              |
| 4           |             | AN960JD10    | WASHER              |
| 4           |             | MS21042-3    | NUT (OR MS21042L3)  |
|             | 4           | MS21043-3    | NUT                 |

**RELEASED**  
09/16/16

|            |                                                                                                                                                       |                                                          |                                                                                                                                                                                                                                                                                                 |          |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| B          | INSTALLATION AND WEIGHT AND BALANCE<br>INFORMATION TRANSFERRED TO DART<br>INSTALLATION INSTRUCTIONS D206-642. ALL<br>HARDWARE UPDATED TO SS HARDWARE. |                                                          | AJS                                                                                                                                                                                                                                                                                             | 08.09.24 |
| A          | NEW ISSUE                                                                                                                                             |                                                          | JB                                                                                                                                                                                                                                                                                              | 97.11.03 |
| REV.       | DESCRIPTION                                                                                                                                           |                                                          | BY                                                                                                                                                                                                                                                                                              | DATE     |
| DESIGN     | JB                                                                                                                                                    | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                                                                                                                                                                                                                                                                                                 |          |
| DRAWN      | AJS                                                                                                                                                   |                                                          |                                                                                                                                                                                                                                                                                                 |          |
| CHECKED    |                                                                                                                                                       | DRAWING NO.                                              | REV. B                                                                                                                                                                                                                                                                                          |          |
| MFG. APPR. | N/A                                                                                                                                                   | D206-648                                                 | SHEET 1 OF 1                                                                                                                                                                                                                                                                                    |          |
| APPROVED   |                                                                                                                                                       | TITLE                                                    | SCALE                                                                                                                                                                                                                                                                                           |          |
| DE APPR.   |                                                                                                                                                       | GND HANDLING WHEEL (GHW) INSTL                           | NONE                                                                                                                                                                                                                                                                                            |          |
| DATE       | 08.09.24                                                                                                                                              |                                                          | <small>COPYRIGHT © 1997 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br/>NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br/>WRITTEN PERMISSION FROM DART AEROSPACE LTD</small> |          |